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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/475,721	12/30/1999	MATTHEW S. REIMINK	1416.04US01	6766

7590

04/24/2002

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EXAMINER

HON, SOW FUN

ART UNIT

PAPER NUMBER

1772

DATE MAILED: 04/24/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action**

Application No.

09/475,721

Applicant(s)

REIMINK ET AL.

Examiner

Sow-Fun Hon

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--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 10 April 2002 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY** [check either a) or b)]

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☒ The proposed amendment(s) will not be entered because:
- (a) ☒ they raise new issues that would require further consideration and/or search (see NOTE below);
  - (b) ☐ they raise the issue of new matter (see Note below);
  - (c) ☒ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
  - (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: see attachment to advisory action.

3. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.
4. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☐ The a) ☐ affidavit, b) ☐ exhibit, or c) ☐ request for reconsideration has been considered but does NOT place the application in condition for allowance because: \_\_\_\_\_.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☒ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: None.

Claim(s) objected to: None.

Claim(s) rejected: 1-3 and 5-20.

Claim(s) withdrawn from consideration: \_\_\_\_\_.

8. ☐ The proposed drawing correction filed on \_\_\_\_\_ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☒ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). 9.
10. ☒ Other: Attachment to advisory action.

sh

*Advisory Action*

1. The proposed amendments in Paper # 10 (filed 04/10/02) has been considered but will not be entered because they raise new issues which would require further consideration and search, and are not deemed to place the application in better form for appeal by materially simplifying the issues for appeal or allowance. Applicant's arguments are addressed below.

2. Applicant argues that the term "rigid" is defined as being deficient or devoid of flexibility by Webster's 10<sup>th</sup> Collegiate Dictionary. Applicant argues that the composite component is flexible while the polymer is rigid, or devoid of flexibility. Since the rigid polymer covers at least a portion of the inorganic substrate, and the composite component is flexible, it follows that the inorganic substrate must be flexible, and that the portion of the rigid polymer which covers the substrate does not impede the flexibility of the substrate. Claim 3 further defines the inorganic substrate as comprising a ceramic which is normally devoid of flexibility, which appears to be a contradiction. Furthermore, Applicant argues that it is the "flexible" composite component with both the polymer and the inorganic substrate which is "flexible" in the present invention, not just the polymer portion of the component.

Applicant is respectfully advised that there is not enough structure in the present claims to distinctly define the flexible composite component in order to resolve the confusion presented by the apparent contradictions in the "rigid" and "flexible" limitations.

3. Applicant argues that Pietsch discloses flexible polymers whereas claim 1 indicates that the polymer is rigid. Applicant further argues that a rigid polymer may or may not be crosslinked, and that a crosslinked polymer may be rigid or flexible. Applicant is respectfully reminded that claim 12 recites a polymer which is from the group of polyurethanes,

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polydimethylsiloxanes and polytetrafluoroethylenes. Pietsch teaches crosslinked silicone rubber (polydimethylsiloxane) and polyurethanes ('461, column 4, lines 20-68 and column 5, lines 1-15). Since the polymer is the same, it follows that the term "rigid" as described by Applicant, is relative unless defined by a rigidity measurement, a property which would then be prima facie inherent until proven otherwise.

4. Applicant argues that the flexible elements in Pietsch involve only a polymer, that the support ring is present only away from the leaflet, and that the support ring may not flex.

Applicant is respectfully reminded that the support ring is taught to be deformable elastically, thus having an elastic limit ('461, column 1, lines 60-68). Pietsch teaches that the upper region of the commissure consists of the cusp (leaflet) material and thus the cusp material is thickened to protect against flapping over (inversion) of the cusp (leaflet). Therefore the leaflet is thicker than the commissure. The wall thickness of the leaflet can be 50-1000 microns ('461, column 2, lines 34-68). Metal and ceramics are taught to be materials used for the support ring, and hence the lower region of the commissure ('461, column 3, lines 45-55).

Any inquiry concerning this communication should be directed to Sow-Fun Hon whose telephone number is (703)308-3265. The examiner can normally be reached Monday to Friday from 9:00 AM to 6:00 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached on (703)308-4251. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9311.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.

SH

04/23/02

  
HAROLD PYON  
SUPERVISORY PATENT EXAMINER  
1772

4/23/02